Systems FAC Conference Call
21 Oct 2004

Mainly discussed the 11 AEC Tasks

Changes/Current actions in red, typically at the bottom.

List of Tasks

1. Border sheets –
    a. Need a border sheet that is both compatible with English and Metric units. Districts overseas use metric designs and the plotters use metric size rolls.
        i. The sheet should have two borders: one for metric and one for english.
        ii. Need to check with multinational firm like Betchel to see what they used for their border sheet.
    b. The NAVFAC recently developed a border sheet. It was suggested that the border become the standard for USACE.
        i. USACE prepares 80% of the Airforce CADD drawings
        ii. Navy prepares 15% of the Airforce CADD drawings
    c. A1 Sheets are 22x34 and are not to an exact scale. They are about 98% accurate.
    d. It has ¾" margin outside of the border, some view it as a waste of drawing space.
    e. Still need to consider an alternate sheet size. Most felt that almost anything could be accomplished with the smaller sheet size. But we need to have an alternate just incase there is a need.
    f. POC Lori Taylor
    g. Able to get the Navy Drawing, nor Watson, nor Toby, could not get to the WEB site.
    h. **Lori sent out a copy**
    i. **Review and make suggestions Action Toby.**
2. Fonts –
    a. Consensus was that true type fonts should be used, because it offers better interoperability with other applications.
    b. 1/8 th inch should still be the standard text height
    c. The standard fonts selected should be proportional or mono-spaced so that the text lines up correctly in a table.
    d. POC Ed Mathison and Jason Fairchild
    e. **Ed has been looking, based on FS drawings, will distribute.**
    f. **Replace with True Type Fonts if possible**
3. Microstation Models
    a. Consensus was that there should only be one model per drawing file.
        i. If multiple models are used it makes farming out the work difficult.
        ii. Multiple models reduce the interoperability of exchanging data with other applications. Autocad can not read multiple models.
        iii. POC Glen Kato, Roger Fujan
        iv. 1 design model and 1 sheet model per file
        v. **Look at level to attach to, probably noplot level**.
4. Work Units
    a. No consensus was reached
    b. POC Roger Porzig

c. Got a long way to go. Speaking strictly V8, does everything internally in metric meters, MM, mm 10,000/mm. Units.def file.
d. Mathison, how big do we make our design cube Default is base on 254,000 not 96,000
e. **Had a long rambling discussion, this is actualy 2 problems.**

5. File Name
    a. No consensus was reached
    b. Standardizing a portion of the user defined characters of the A/E/C Standards. It was suggested:
        i. P2 number - 6 characters. It was stated that adding the P2 number to the file name does not offer any value to the customer. P2 is an internal designation that only benefits USACE.
        ii. Military Projects
            1. Airforce - 9 characters be used for the project number.
            2. Army - 6 characters be used for the project number
        iii. PN number that is assigned in the Planning and follows the project to Construction.
    c. POC Mike Watson
    d. **Need to compare the names, key items universal to all.**
6. Color Table
    a. No consensus was reached
    b. POC O-Song Kwon and Roger Fujan
    c. **Should not tie color to weight.**
    d. **Which number is half toned.**
7. Standard Symbol and Abbreviation Sheets
    a. Want to create a library of standard sheets, everything from the cover sheet up to the first civil sheet (design sheet). Also, the standard sheets for each discipline such as the soil classification sheet, electrical legend, etc.
    b. Need to verify that the symbols use comply with UDS
    c. Send District examples to Ed Mathison or Mike Watson
    d. **Will compile listing, Mike has some good symbols to review**
8. Cell types to be used in standards
    a. General consensus was that graphic cells should be added to the standard with the option to set the symbology based on the level.
    b. Work in conjunction with item 11.
    c. POC O-Song Kwon
    d. **Pattern and hatching cell, pattern is on discipline specific cell.**
    e. **AutoCAD pattern separate from block**
9. Process for referencing sheets
    a. Establish a standard procedure:
        i. Current process used by all Districts: project is drawn one to one and the border sheet is scaled up or down.
        ii. AutoCAD process: the project is drawn one to one but the sheet model is scaled to paper units. Advantage is for districts that work with AutoCAD users.
        iii. Raster reference file, from design model to sheet model works.
    b. POC Roger Fujan, Debra Solis
10. CADD files used in site development need to use real world coordinates.

a. GIS representative stated that they commonly use Microstation drawings in Arcview. Smaller projects are not georeferenced and they must be orientated using a two point translation.
b. No resolution or follow-up was scheduled. The problem was noted.
c. POC Roger Porzig, Brian Haney

11. Converting Cells to Graphic Cells
    a. Problem is that many current cells have graphics on multiple layers (for example, a light fixture has a letter, a junction box and a fixture all on separate layers for display purposes).
    b. Roger Fujan suggested we have cells developed on default layer and then they can be placed on the active level (preferred method for Autocad). This creates problems with being able to turn certain graphics off in reference files.
    c. Microstation has the ability to place nested cells, which needs to be investigated.
    d. Edward Huell, O-Song Kwon and Rick Grubbs will investigate.
12. **New topic Should we standardize on a version of MicroStation when discussing the Standards? Yes**